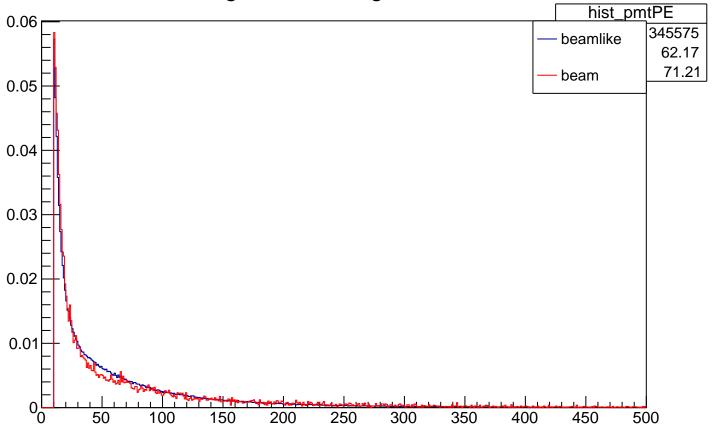
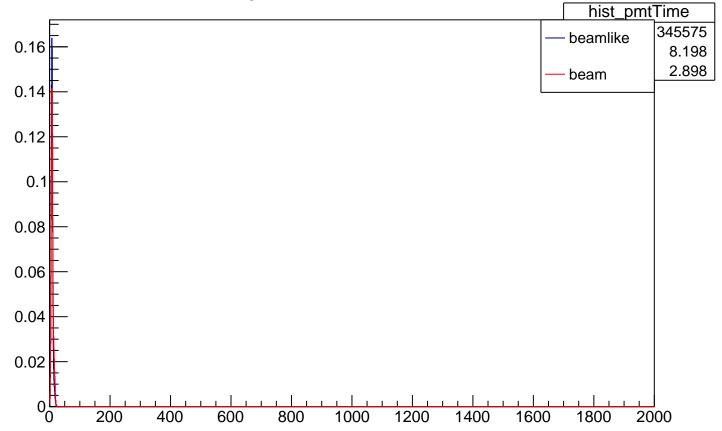
Single PMT Charge overview

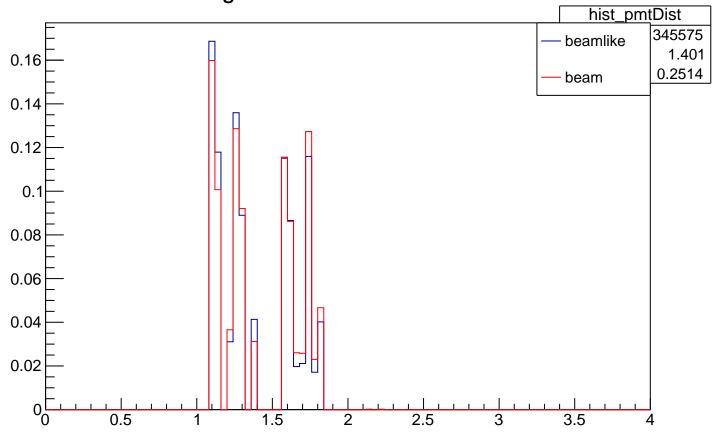


Single PMT Time overview

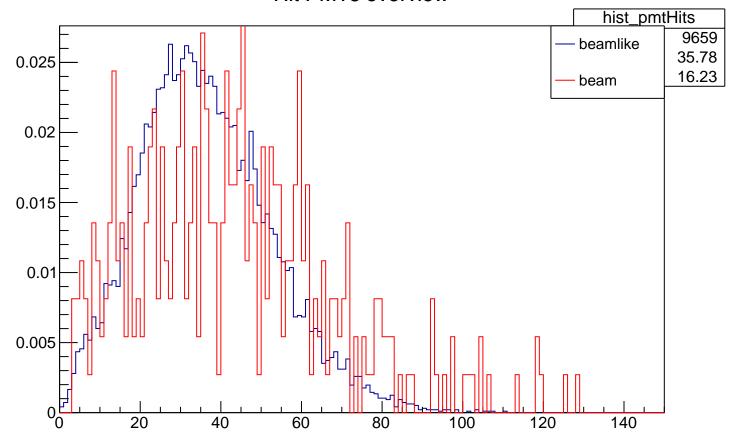


Single PMT Angle overview hist_pmtAngle 345575 beamlike 1.112 0.07 0.5263 beam 0.06 0.05 0.04 0.03 0.02 0.01 0 0.5

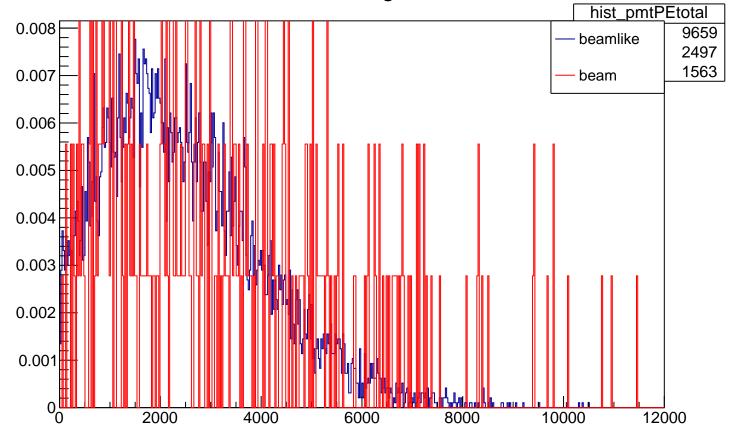
Single PMT Distance overview



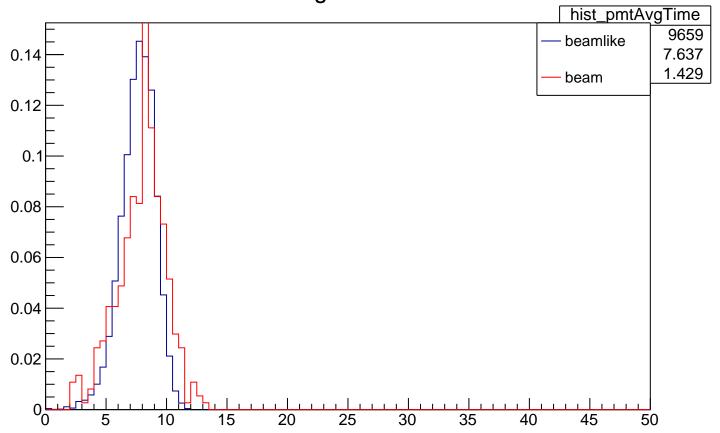
Hit PMTs overview



PMT Total Charge overview

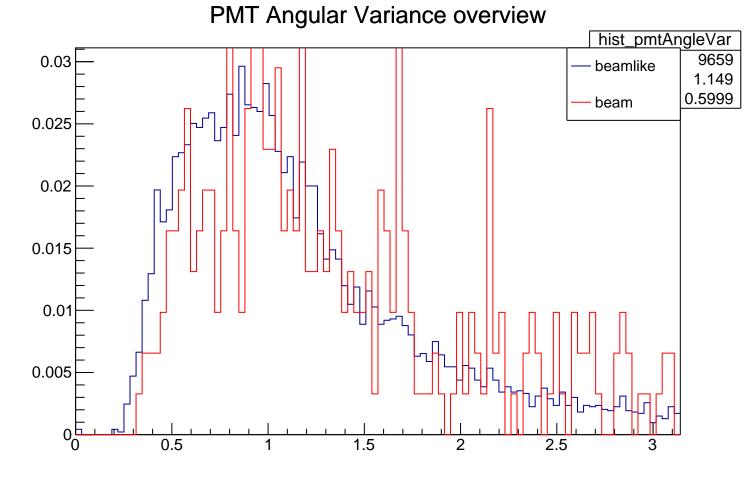


PMT Average Time overview

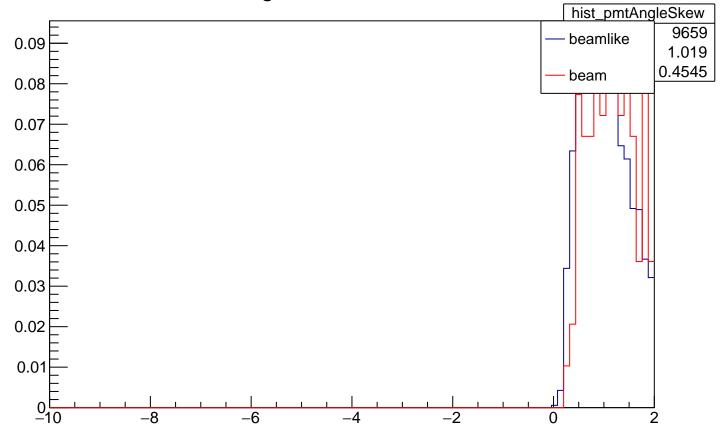


PMT Barycenter Angle overview hist_pmtAngleBary 9659 beamlike 0.03 0.8315 0.4359 beam 0.025 0.02 0.015 0.01 0.005 0.5 1.5

PMT Angular RMS overview hist_pmtAngleRMS 9659 beamlike 1.181 0.2473 beam 0.05 0.04 0.03 0.02 0.01 o^F 0.5 1.5

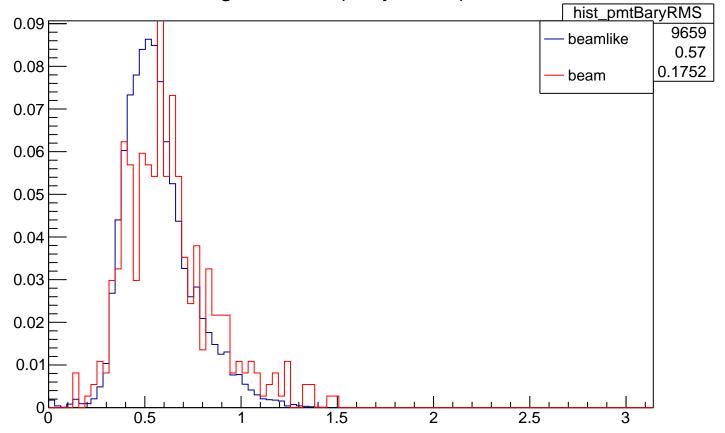


PMT Angular Skewness overview

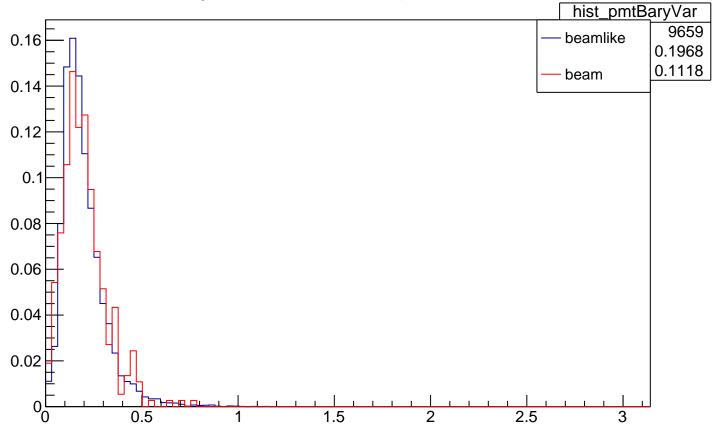


PMT Angular Kurtosis overview hist_pmtAngleKurt 0.06 9659 beamlike -2.0552.127 beam 0.05 0.04 0.03 0.02 0.01

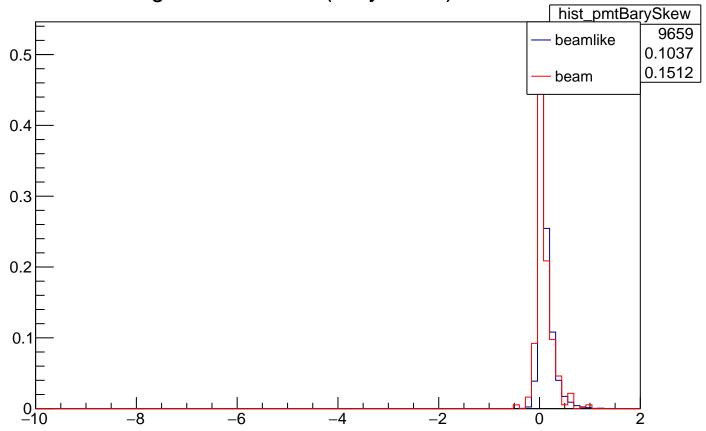
PMT Angular RMS (Barycenter) overview



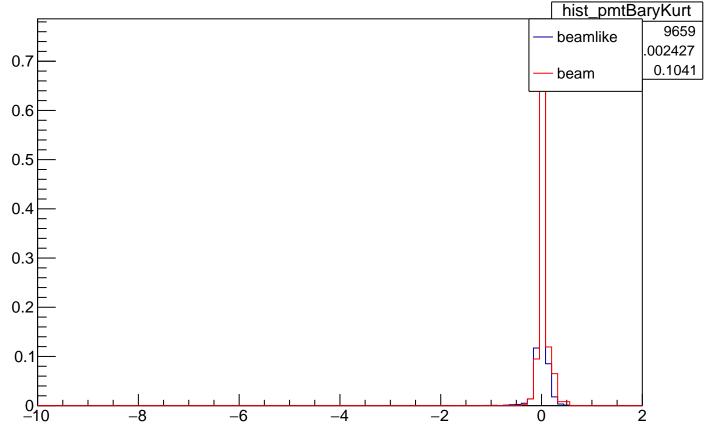
PMT Angular Variance (Barycenter) overview



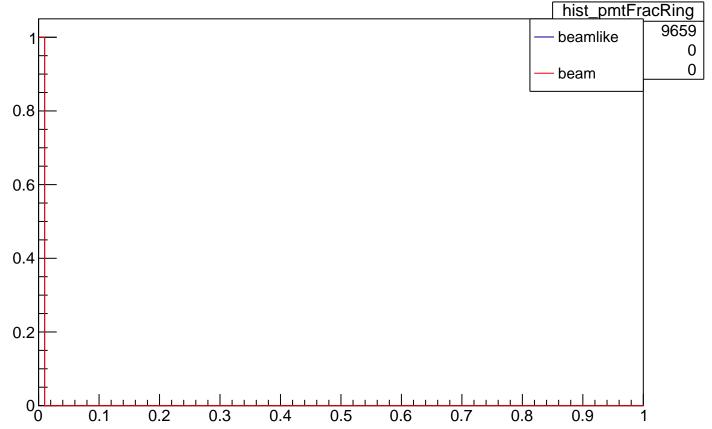
Angular Skewness (Barycenter) overview



Angular Kurtosis (Barycenter) overview

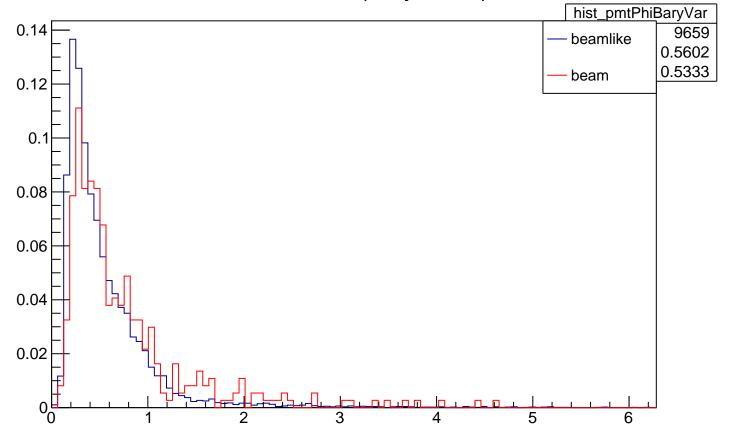


Fraction of PMT hits in Ring (weighted)

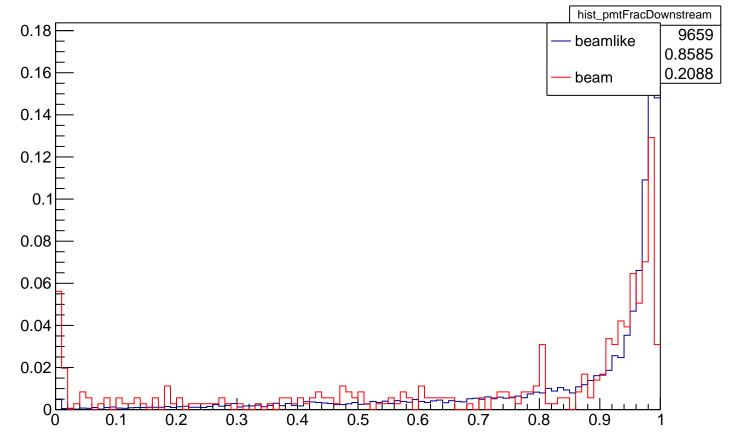


Phi RMS (Barycenter) hist_pmtPhiBaryRMS 9659 beamlike 0.9263 0.04 0.3241 beam 0.035 0.03 0.025 0.02 0.015 0.01 0.005 0<mark>E</mark> 0.5 1.5 2.5

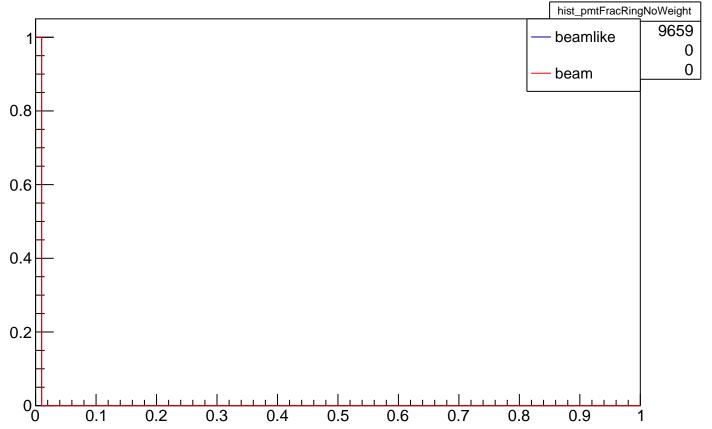
Phi Variance (Barycenter)



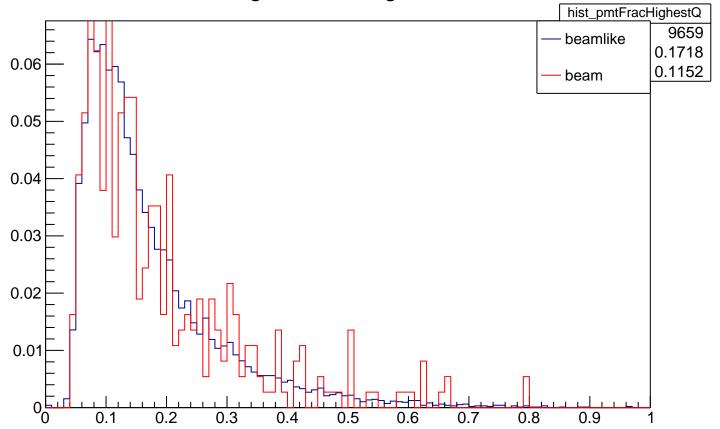
Fraction of PMT hits downstream



Fraction of PMT hits in Ring

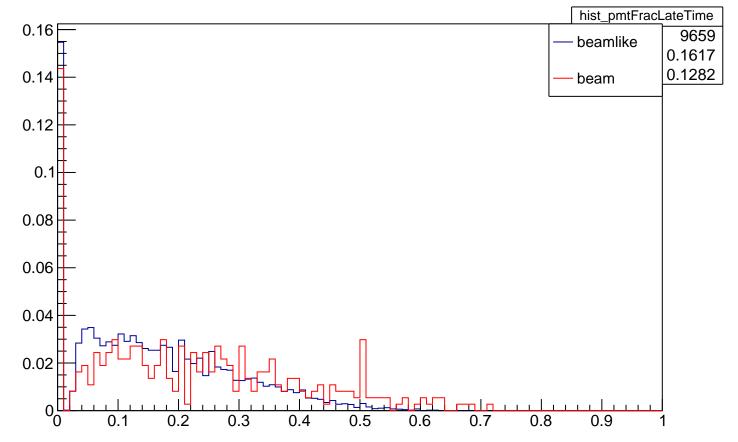


Charge fraction highest PMT



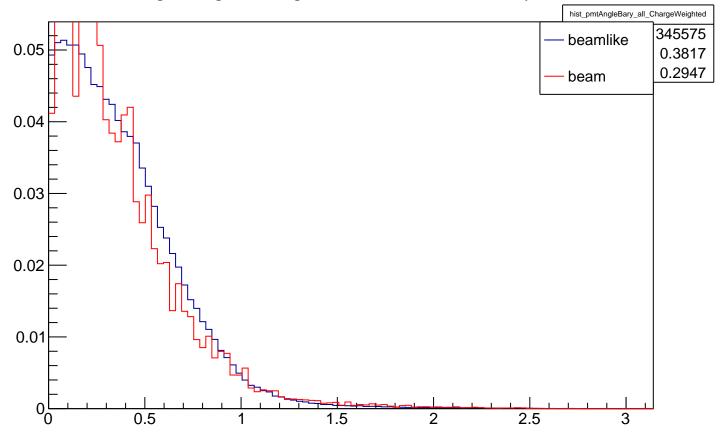
Fraction of low charge PMT hits hist_pmtFracLowCharge 0.045 9659 beamlike 0.4565 0.1409 0.04 beam 0.035 0.03 0.025 0.02 0.015 0.01 0.005 00 0.2 0.3 0.7 0.4 0.5 0.6 8.0 0.9

Fraction of late PMT hits



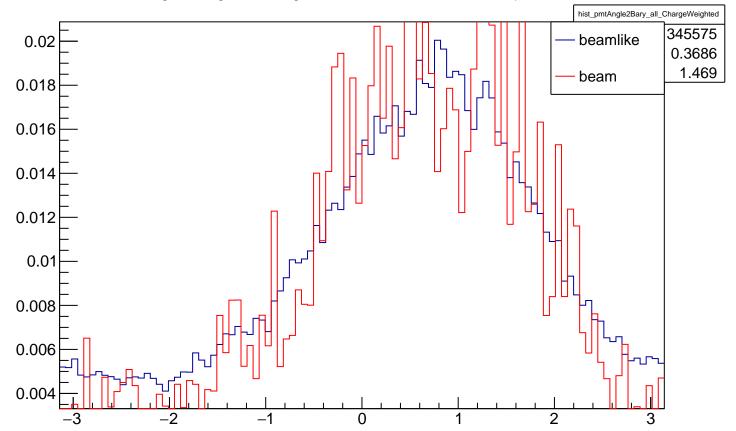
Angular distribution w.r.t. barycenter hist_pmtAngleBary_all 345575 beamlike 0.5854 0.03 0.4253 beam 0.025 0.02 0.015 0.01 0.005 0, 0.5 1.5

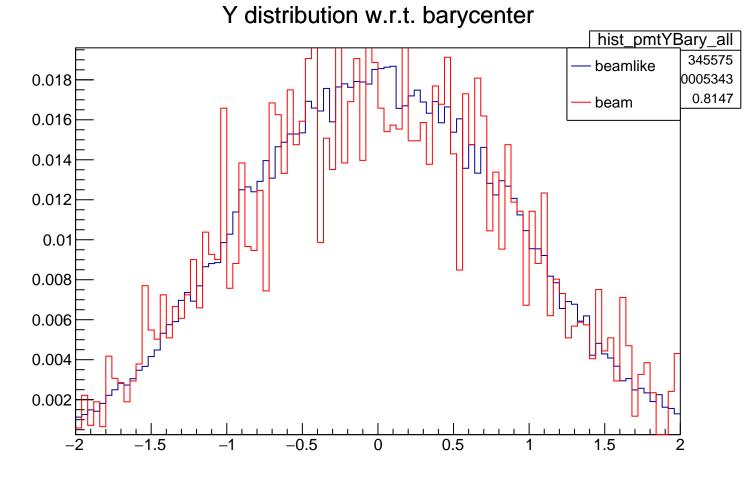
Charge weighted angular distribution w.r.t. barycenter



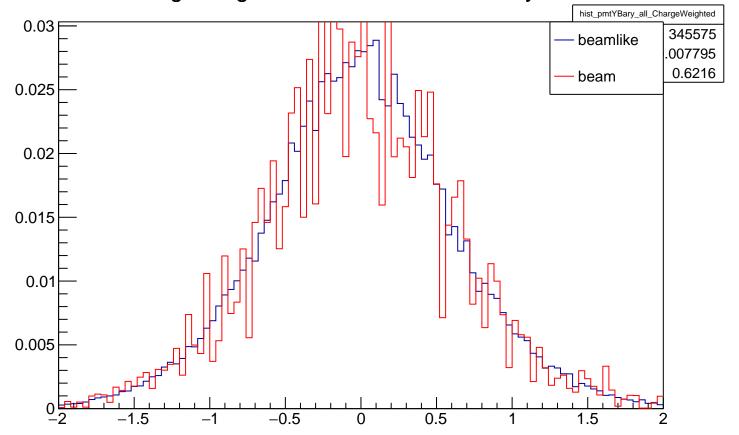
Angular distribution w.r.t. barycenter (II) hist_pmtAngle2Bary_all 345575 beamlike 0.2616 0.014 1.615 beam 0.012 0.01 0.008 0.006

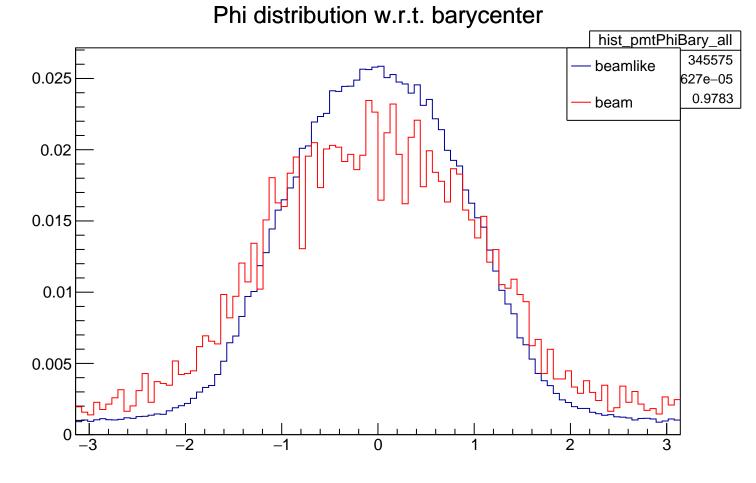
Charge weighted angular distribution w.r.t. barycenter (II)



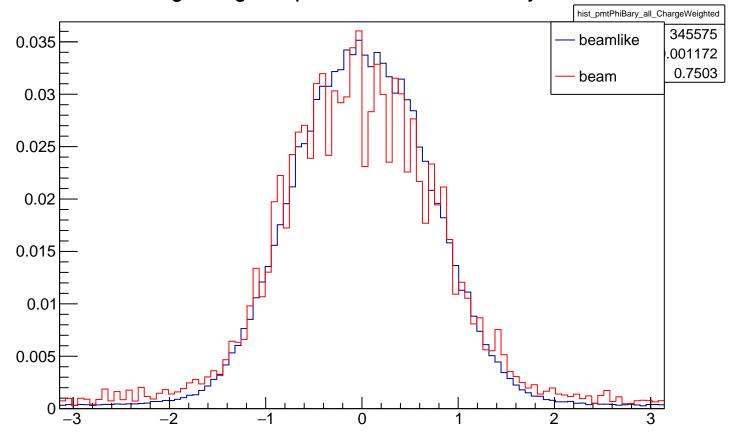


Charge weighted Y distribution w.r.t. barycenter



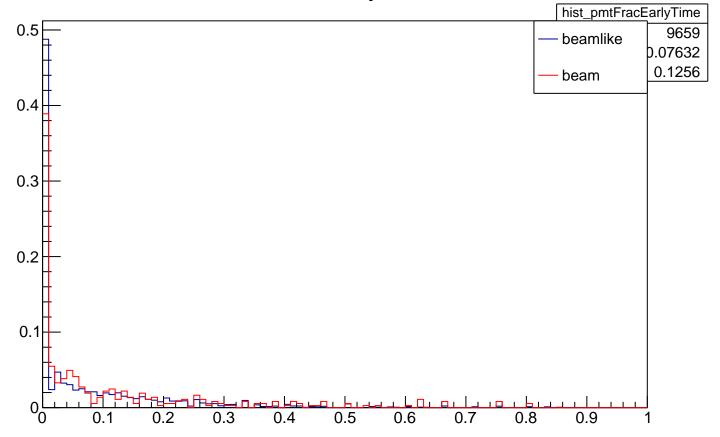


Charge weighted phi distribution w.r.t. barycenter

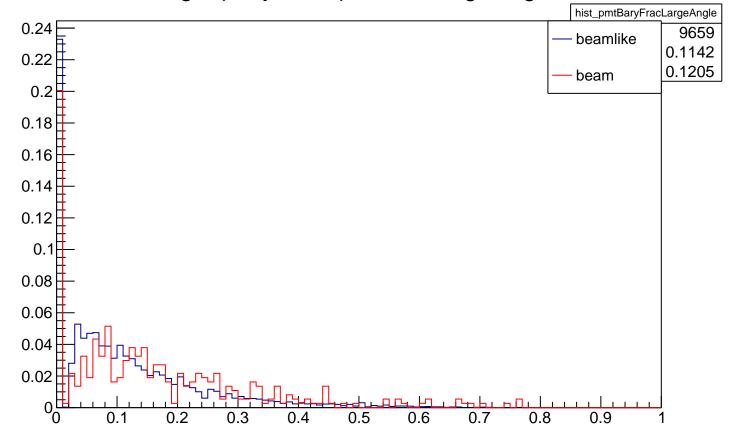


Phi Large Angles (Barycenter) hist_pmtPhiBaryFracLargeAngle 9659 beamlike 0.06 0.2993 0.22 beam 0.05 0.04 0.03 0.02 0.01 0 L 0.2 0.3 0.5 0.6 0.7 0.1 0.4 8.0 0.9

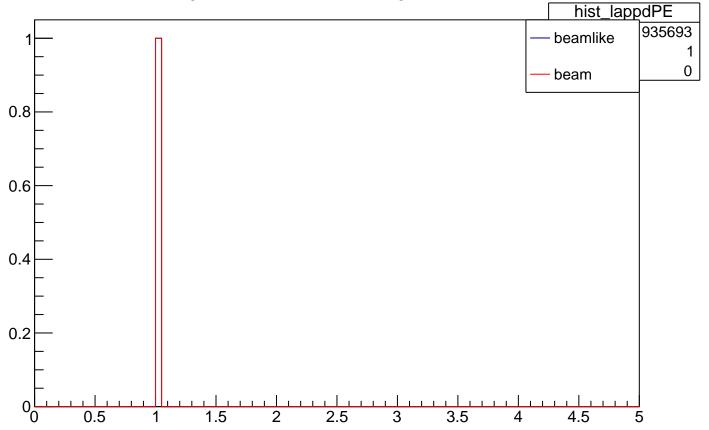
Fraction of early PMT hits



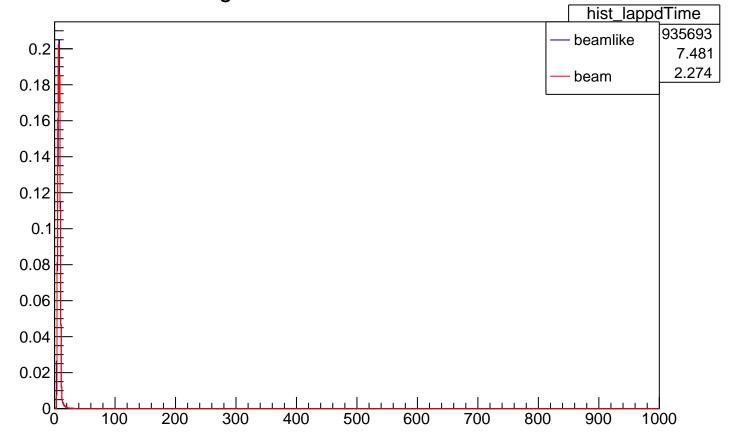
Angle (Barycenter) fraction large angles



Single LAPPD Hit Charge overview

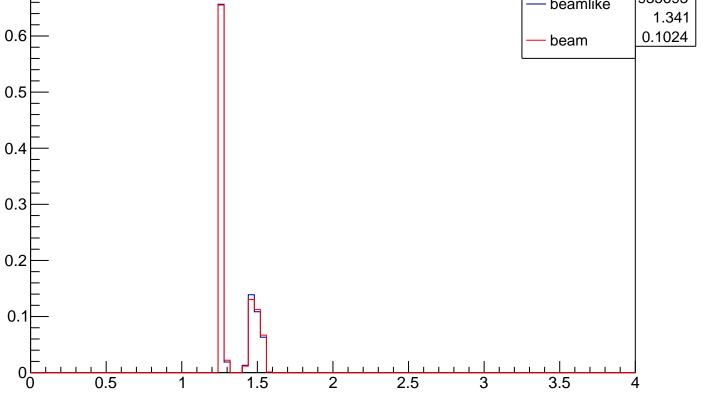


Single LAPPD Hit Time overview

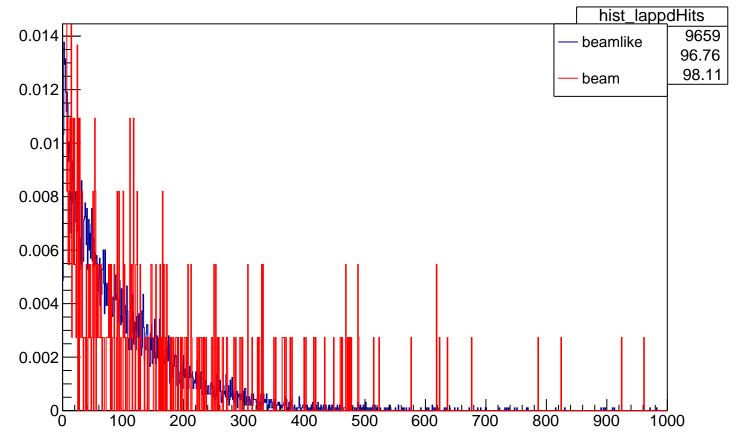


Single LAPPD Hit Angular overview hist_lappdAngle 935693 beamlike 0.5379 0.1 0.2852 beam 0.08 0.06 0.04 0.02 0 P 0.5 1.5 2.5

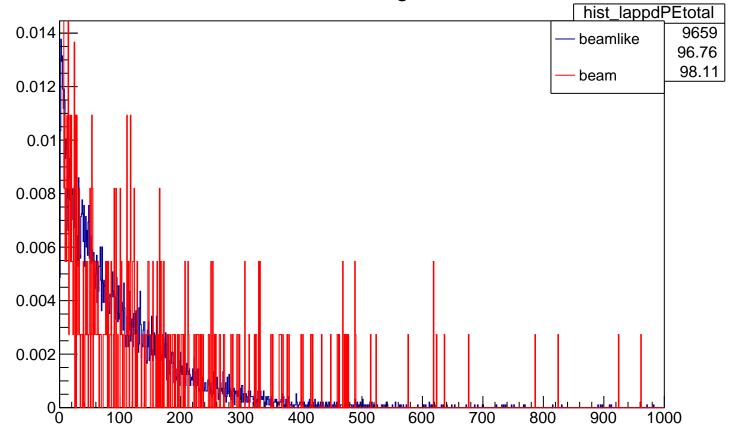
Single LAPPD Hit Distance overview hist_lappdDist 935693 beamlike 1.341 0.1024 beam



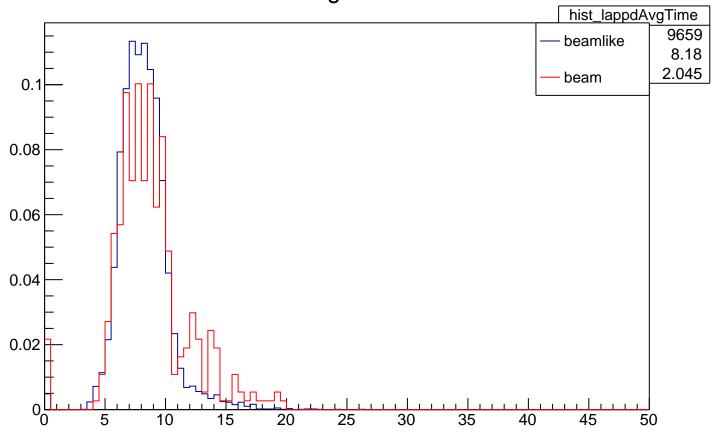
Number LAPPD Hits overview



LAPPD Total Charge overview

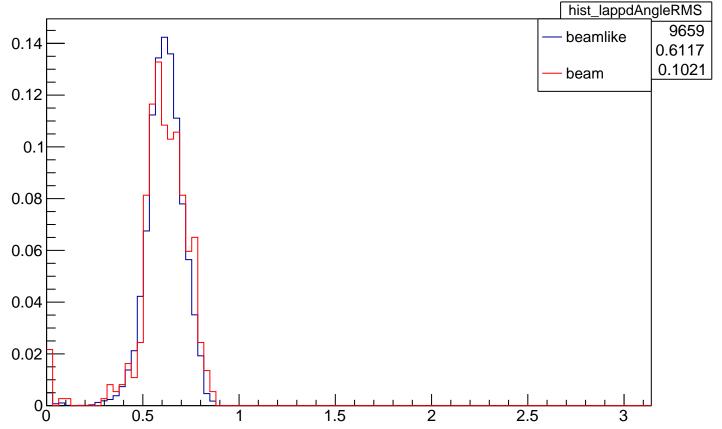


LAPPD Average Time overview

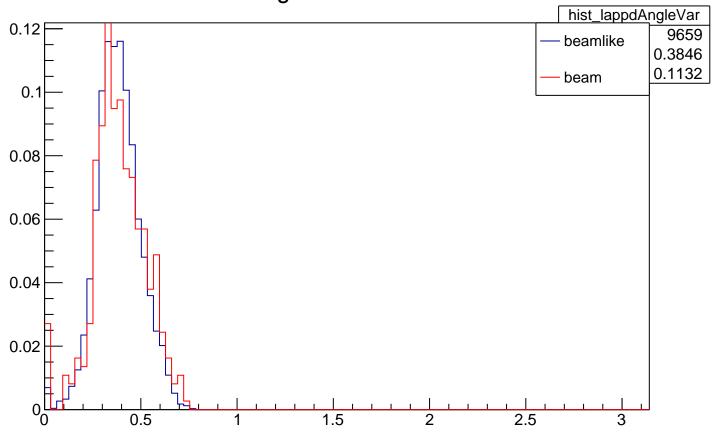


LAPPD Barycenter Angle overview hist_lappdAngleBary 9659 beamlike 0.3396 0.06 0.1847 beam 0.05 0.04 0.03 0.02 0.01 0, 0.5 1.5 2.5

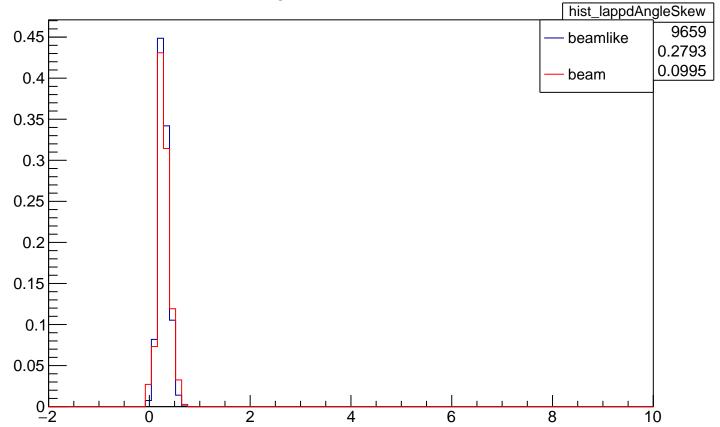
LAPPD Angular RMS overview



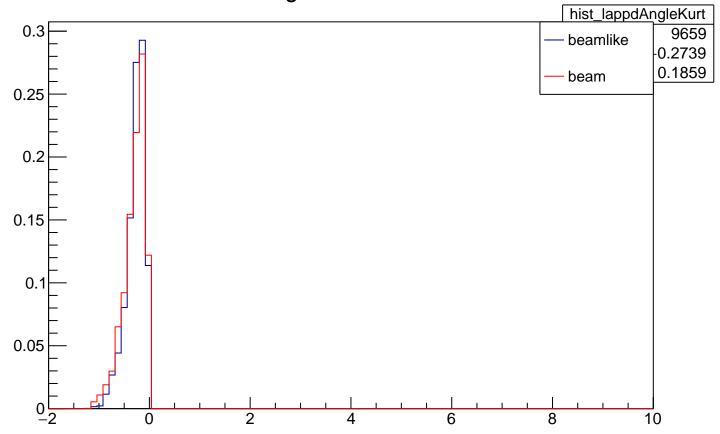
LAPPD Angular Variance overview



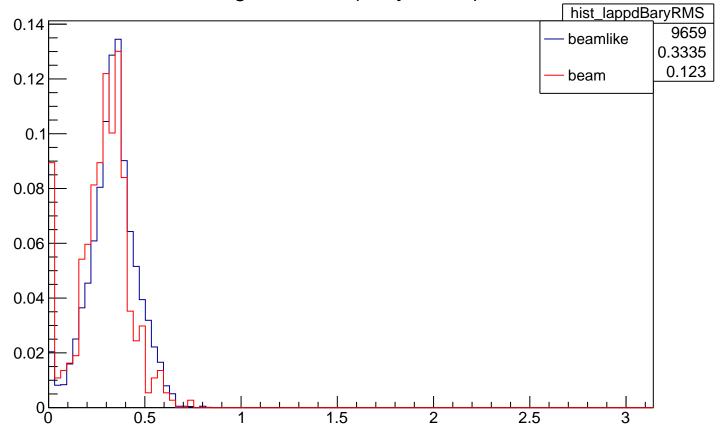
LAPPD Angular Skewness overview



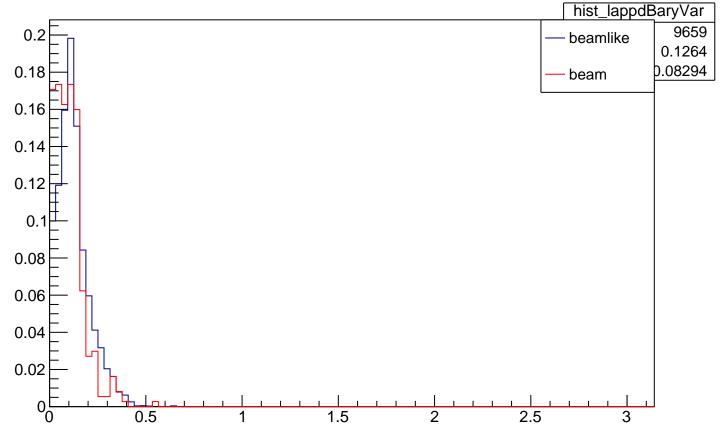
LAPPD Angular Kurtosis overview



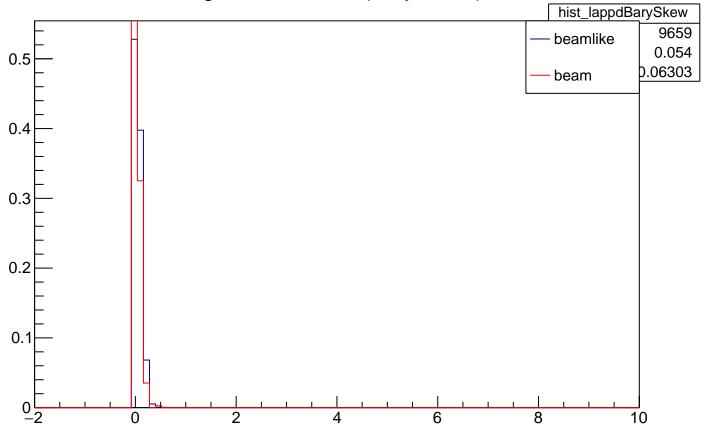
LAPPD Angular RMS (Barycenter) overview



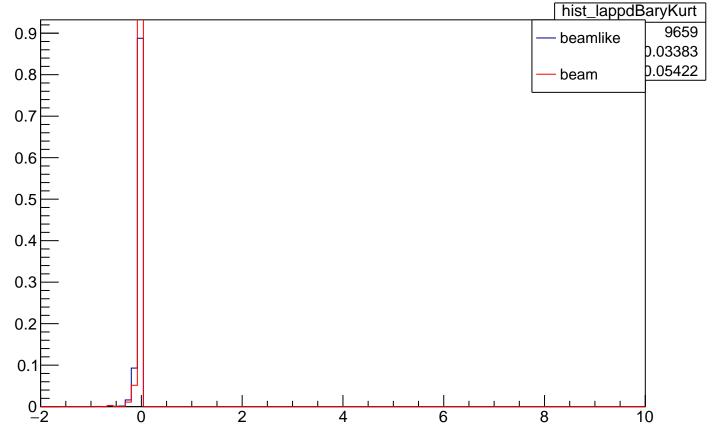
LAPPD Angular Variance (Barycenter) overview



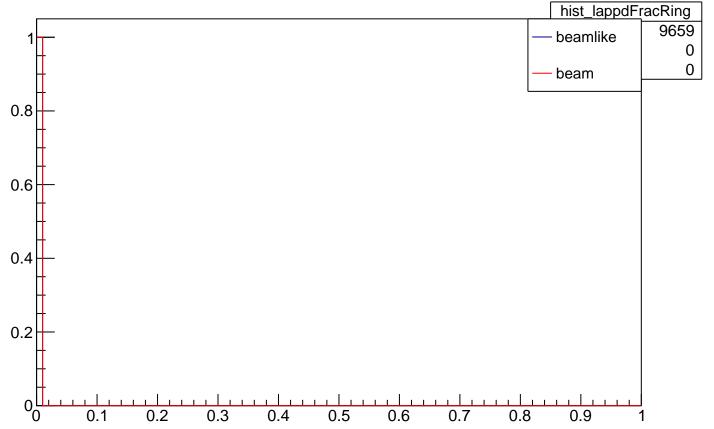
LAPPD Angular Skewness (Barycenter) overview



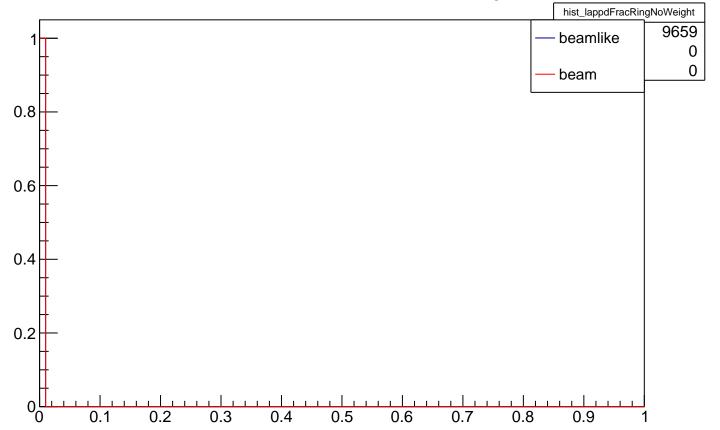
LAPPD Angular Kurtosis (Barycenter) overview



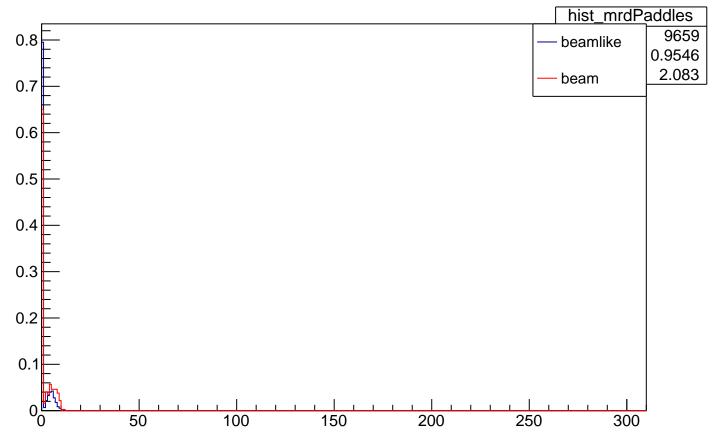
Fraction of LAPPD Hits in Ring



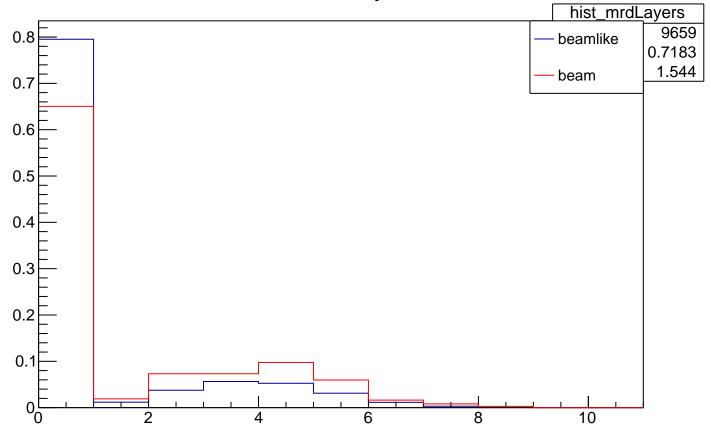
Fraction of LAPPD Hits in Ring



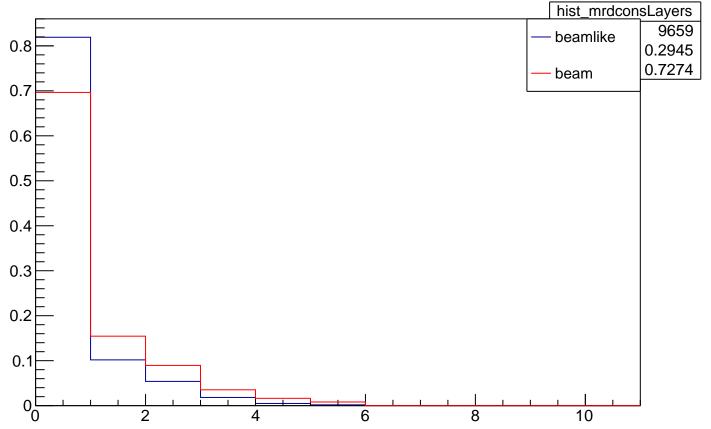
Num MRD Paddles hit



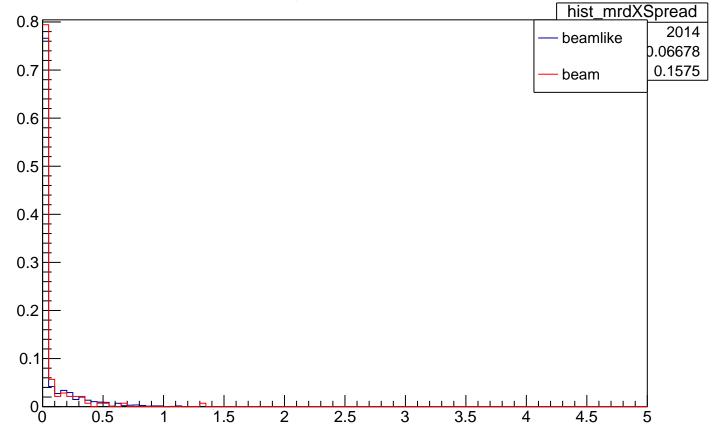
Num MRD Layers hit



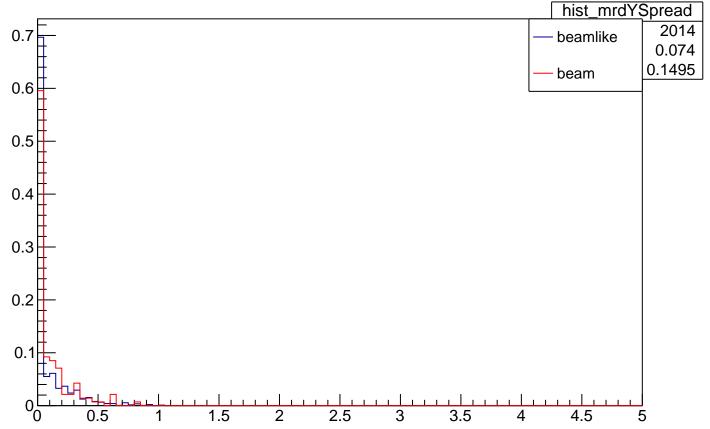
Num consecutive MRD Layers hit



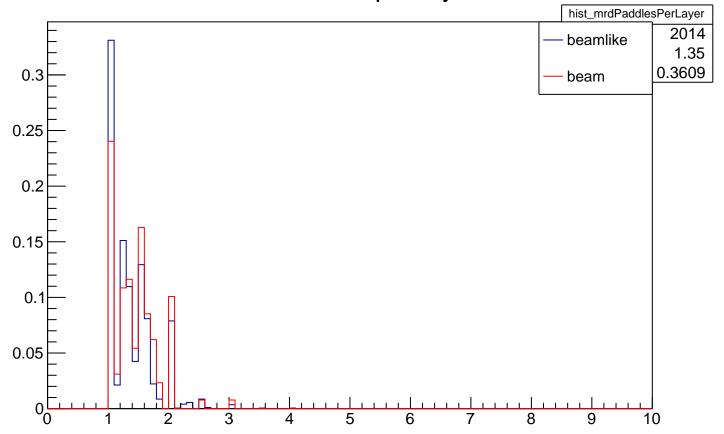
MRD Layer-wise X spread



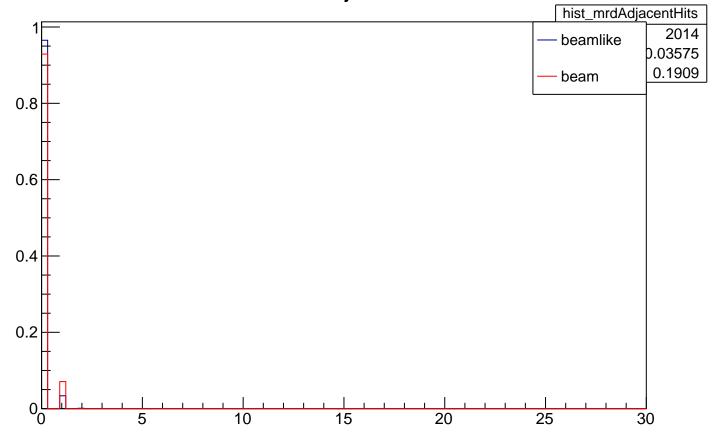
MRD Layer-wise Y spread



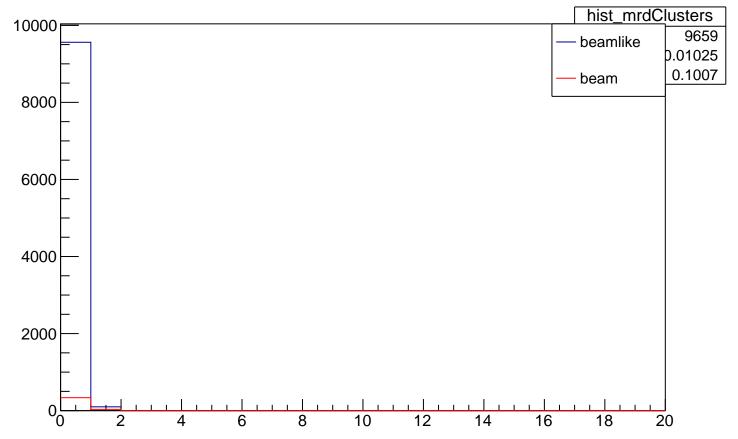
MRD Paddles per Layer



MRD # Adjacent hits



Num MRD Clusters



Energy primary particle hist_energy 0.0022 9659 beamlike 587.2 0.002 331 beam 0.0018 0.0016 0.0014 0.0012 0.001 0.0008 0.0006 0.0004 0.0002 500 2000 2500 3500 1000 1500 3000 4000 4500 5000

Number of rings hist_nrings 9659 beamlike beam 0.8 0.6 0.4 0.2 0, 2 10 12 20 14 16 18

Multiple Rings hist_multiple_rings 9659 beamlike 0 0 beam 8.0 0.6 0.4 0.2 0, 0.2 0.6 0.8 1.2 1.6 1.8 0.4 1.4